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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,488	04/26/2001	Vincent Pluvinage	RXSD1001-3	8079

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EXAMINER
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BATES, KEVIN T

ART UNIT	PAPER NUMBER
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2153

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/830,488	<b>Applicant(s)</b> PLUVINAGE ET AL.	
	<b>Examiner</b> KEVIN BATES	<b>Art Unit</b> 2153	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 146, 148, 174-179 and 189-196 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 146, 148, 174-179, and 189-196 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

This Office Action is in response to a communication received on March 25, 2008.

Claims 1-145, 147, 149-173, and 180-188 have been cancelled.

Claims 146 and 174 have been amended.

Claims 146, 148, 174-179, 189-196 are pending in this application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 146, 148, 174-179, and 189-196 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger in view of Campbell (6212496).**

**Regarding claim 146,** Berger teaches a device for producing customized audio data (Column 2, lines 2 – 3), comprising:

A headset, the headset including processing resources mounted thereon (Column 6, lines 23 – 28), including

a data processor (Column 6, lines 23 – 28); a data storage medium, coupled to the data processor, storing a hearing profile of a customer (Column 2, lines 54 – 59; see also Column 3, lines 41 – 45);

an audio transducer (Column 6, lines 23 – 28, the ADC, amplifier, and the speaker), coupled to the data processor; a communication port coupled to the processor (Column 6, lines 26 – 27; the antenna);

logic to produce customized audio data, by processing audio data received on the communication port from an external source using the hearing profile (Column 2, lines 54 – 65); and

a computer program stored on the data storage medium executable by the data processor supporting a process to provide the hearing profile (Column 3, lines 20 – 38).

Berger does not explicitly indicate having an interactive process to produce the hearing profile, the interactive processing including producing sounds using the transducer mounted on the headset and logic to communicate with an external data processing device having a user interface by which the user provides input in response to said sounds during the interactive process.

Campbell teaches an interactive process that determines a hearing profile using a sound outputs (Column 5, line 60 – Column 6, line 19) and discloses that the hearing test signals can be provided by a cellular phone through a hearing aid device (Column 6, lines 49 - 52) and the cellular phone received input from the user to construct the hearing profile (Column 5, lines 60 – 64).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to use Campbell's teaching of performing a hearing test in Berger's in order to create new hearing profiles or prescriptions for the user rather than having to have preprogrammed profiles.

**Regarding claim 174**, Berger teaches a method for producing a hearing profile, comprising:

providing a headset having an audio transducer (Column 6, lines 23 – 28);

coupling the headset via a communication channel to an external data processor having a user interface (Column 6, lines 23 – 28);

executing an interactive process using the user interface and the audio transducer to develop a hearing profile (Column 3, lines 20 – 38);

producing a customized audio data product using the hearing profile (Column 2, lines 54 – 65); and

playing the customized audio data product on the headset (Column 1, lines 63 – 67).

Berger does not explicitly indicate an interactive process using the user interface on the headset including producing sounds using the audio transducer during the interactive process.

Campbell teaches an interactive process that determines a hearing profile using a sound outputs (Column 5, line 60 – Column 6, line 19) and discloses that the hearing test signals can be provided by a cellular phone through a hearing aid device (Column 6, lines 49 - 52) and the cellular phone received input from the user to construct the hearing profile (Column 5, lines 60 – 64).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to use Campbell's teaching of performing a hearing test in Berger's in order to create new hearing profiles or prescriptions for the user rather than having to have preprogrammed profiles.

**Regarding claim 148**, Berger teaches the audio data playback device of claim 146, wherein that the audio transducer comprises stereo speakers (Column 6, lines 25 – 27).

**Regarding claim 175**, Berger teaches the device of claim 174, wherein the customized audio data product comprises a transformation according to the hearing profile of the audio data product (Column 2, lines 54 – 65).

**Regarding claim 178**, Berger teaches the device of claim 174, including: logic to store the customized audio data product on a machine readable medium (Column 6, lines 5 – 10).

**Regarding claim 179**, Berger teaches the audio testing device of claim 174, indicate a port adapted to couple a removable data storage device to the data processor, and resources for playing an audio data product stored in the removable data storage device (Column 6, lines 5 – 10).

**Regarding claims 189 and 193**, Berger teaches the playback device of claims 146 and 174, wherein the hearing profile is provided by an interface allowing selection by the user according to personal preferences (Column 3, lines 20 – 38).

**Regarding claims 191 and 195**, Berger teaches the playback device of claims 146 and 174, including a computer program stored on the data storage medium

executable by the processor to communicate with an external data processing device providing a user interface supporting an interactive process to modify the hearing profile (Column 3, lines 20 – 38).

**Regarding claims 192 and 196**, Berger teaches the playback device of claims 146 and 174, wherein the communication port comprises a port for wireless communication (Column 6, lines 25 – 27).

**Regarding claim 176**, Berger teaches the device of claim 174.

Berger does not explicitly indicate an interface by which the customized audio data product is received from a remote site.

Campbell teaches a system for having a hearing profile creating customized audio data that includes (Column 3, lines 14 – 16) an interface by which the customized audio data product is received from a remote site (Column 6, lines 39 – 43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Campbell's teaching of having a cellphone maintain the profile and perform the customization for the hearing aid in order to allow the complex phone perform the operations and allow the hearing aid to be a simpler and not have to perform the transformation of the audio.

**Regarding claim 177**, Berger teaches the device of claim 174.

Berger does not explicitly indicate wherein the customized audio data product comprises at least a portion of the hearing profile, and the audio data product for transformation according to the hearing profile at a remote site.

Campbell teaches teaches a system for having a hearing profile creating customized audio data that includes (Column 3, lines 14 – 16) the customized audio data product comprises at least a portion of the hearing profile, and the audio data product for transformation according to the hearing profile at a remote site (Column 6, lines 39 – 43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Campbell's teaching of having a cellphone maintain the profile and perform the customization for the hearing aid in order to allow the complex phone perform the operations and allow the hearing aid to be a simpler and not have to perform the transformation of the audio.

**Regarding claims 190 and 194,** Berger teaches the device of claims 146 and 174.

Berger does not explicitly indicate the hearing profile is provided using the interface according to a hearing test.

Campbell teaches teaches a system for having a hearing profile creating customized audio data that includes (Column 3, lines 14 – 16) the hearing profile is provided using the interface according to a hearing test (Column 5, line 60 – Column 6, line 19).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to use Campbell's teaching of performing a hearing test in Berger's in order to create new hearing profiles or prescriptions for the user rather than having to have preprogrammed profiles.



### ***Response to Arguments***

Applicant's arguments filed March 25, 2008 have been fully considered but they are not persuasive.

The applicant argues that the Berger teaches using preprogrammed hearing profiles and not an interactive process. The applicant further argues that the Campbell does not teach the limitations because it does not disclose the interactive process occurring at an external device.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding claim 148, The examiner disagrees with the applicant's arguments against the combination of the references Berger and Campbell. Berger teaches a plurality of devices that may be programmed with hearing profiles. Among these devices are cellular telephones, headsets, and hearing aids (Column 1, line 65 – Column 2, line 3). Berger teaches these devices have the hardware to use a user's prescription to customize data (Column 3, line 1 – 18). Berger further teaches that the devices such as the headset can be attached wirelessly or by a wired to an external device (Column 6, lines 23 - 34). Berger does not however disclose any interactive method of programming the prescription or hearing profile on these devices using a

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series of produced sounds from an external device. Campbell teaches an interactive hearing test for the user to provide input into a cellular phone to help produce a hearing profile (Column 5, line 60 – Column 6, line 11). As part of this teaching, Campbell discloses using the cell phone to interact with a hearing aid device, where the cellphone transmits the signal to the hearing aid and the hearing aid adjusts the signal through an audio transducer (Column 6, lines 39 – 43). So Campbell teaches an external device (the cellphone) that provides an interface and sounds through the headset (hearing aid) to produce a hearing profile for the user. Berger teaches that a hearing profile can be programmed for a hearing aid or headset. The combination of Campbell and Berger creates an obvious teaching that one can use the Cellphone in Campbell in combination with the hearing aid or headset in Berger to use Campbell's interactive hearing test to program Berger's hearing aid for the correct user prescription. The motivation for this combination is that it is easier to change and adjust the hearing prescription in Berger with the test in Campbell than to use the smart cards as taught in Berger.

Regarding claim 174, the examiner notes that the claim recites that the user interface is located on the headset and that the sounds and audiotransducer are also part of the headset. Because of this distinction from claim 148, the combination of Berger and Campbell is slightly different. Berger teaches the system of having a user prescription programmed into a wireless device (Column 4, lines 34 – 46), but does not explicitly indicate the user interface and sound production in the interactive process. Campbell teaches a cellular phone that can provide the user with a hearing test and

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creates the hearing profile based on the user input (Column 5, line 60 – Column 6, line 11). It would have been obvious to one of ordinary skill in the art that the interactive processing Campbell can be used to improve the cellphone in Berger to create the hearing profile dynamically and without the use of the smart cards.

Regarding claim 148, the applicant argues that Berger does not disclose wherein the audio transducer comprises stereo speakers. The examiner disagrees, Figure 6, Column 6, lines 23 – 34, shows a headset that includes two speakers, thus stereo speakers. Further in Column 6, lines 41 – 46, Berger discloses that each can be programmed with a separate prescription.

Regarding claim 191 and 195, the applicant is relying upon Campbell for the teaching of the interactive hearing test, not Berger.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN BATES whose telephone number is (571)272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Bates/  
Primary Examiner, Art Unit 2153